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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,251	04/03/2001	Mutsuo Nishi	084437/0143	1311
22428	7590	03/15/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			CHANG, VICTOR S	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/824,251

Applicant(s)

NISHI ET AL.

Examiner

Victor S Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17,20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 1/16/2004. Applicants' amendments claims 1, 11, 20 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn. In particular, Applicants' argument that "equating the square root of the number of voids/mm<sup>2</sup> of the film as described by Shirai with the "ratio of the number of voids to film thickness of not less than 0.3" is not proper" (Remarks, page 9, bottom paragraph) has been fully considered and is persuasive. However, Applicants' arguments are moot in view of the new grounds of rejection made over Sasaki et al. (EP 0 884 347) in view of Shirai et al. (US 5698489), under a different interpretation of the previously applied reference (US 5698489 is essentially identical to EP 0 672 536 by the same inventors Shirai et al.)

### ***Response to Amendment***

4. Claims 1-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (EP 0 884 347) either individually, or in view of Shirai et al. (US 5698489), substantially for the reasons set forth in section 8 of Paper No. 9, together with the following additional observations.

With respect to Applicants' argument that "Sasaki does not inherently teach a void/film thickness ratio of not less than 0.3 void/ $\mu\text{m}$ " (Remarks, page 8, second full

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paragraph), the Examiner repeats (see Paper No. 9, pages 4-5, bridging paragraph) that since Sasaki teaches the entire applicable range of the void forming incompatible thermoplastic resins (pages 4-5, bridging paragraph), and essentially the same processing method as the instant invention (page 6, lines 19-21, and Example 1), in the absence of unexpected results, it is believed that a suitable void/thickness ratio is either also implicitly disclosed by Sasaki, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to obtain a high quality image-receiving sheet.

Alternatively, it is noted that Shirai's invention is directed to a thermal transfer image-receiving sheet (Abstract), which is formed by extruding a compound comprising a polyester resin and a polyolefin resin and biaxially stretching the resultant extrudate (column 4, lines 17-19). In Fig. 1, Shirai shows that the conceptual shape and distribution of the voids in a section through the thickness of the film (column 3, line 66 to column 4, line 2), which is essentially the same as the SEM photograph of a section of the instant invention (see Appendix of Amendment filed 1/16/2004). Shirai expressly teaches that the number of microvoids observed in the section of the substrate sheet (reads on instantly claimed layer A) is  $3.7 \times 10^4$  to  $2.2 \times 10^5/\text{mm}^2$  (column 3, lines 26-27), and the fractal dimension of the voids is not less than 1.45 (column 3, lines 38-39). Further, Shirai teaches that by bringing the number of microvoids to  $3.7 \times 10^4/\text{mm}^2$  or more, the sensitivity of the image-receiving sheet in printing can be improved (column 5, lines 24-28). As such, although Shirai lacks an express teaching of the number of voids to the film thickness, since Shirai teaches essentially the same process, the same film composition, the same shape and distribution of the voids, and the same film

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composition, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to modify Sasaki's film with a high number of voids in the cross-section, i.e., the suitable number of voids to the film thickness is believed to be either implicitly disclosed, or an obvious optimization to one skilled in the art, motivated by the desire to obtain an improved sensitivity of the image-receiving sheet, as taught by Shirai. It should be noted that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. See MPEP § 2112.01.

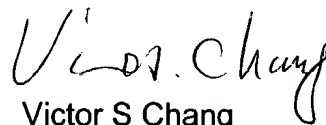
Finally, with respect to Applicants' argument that "Tables 2 and 3 clearly show that the films of the present invention have greater spectral reflectance and better handling properties than the films of Sasaki (Remarks, page 16, second paragraph), the Examiner notes that the aforementioned properties are absent from any of the claims, and also believed to be inherent to the film as claimed. Further, Applicants appear to be arguing the cited references individually. In response to Applicant's arguments, it is asserted that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor S Chang  
Examiner  
Art Unit 1771

3/4/2004